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Notes upon a small collection of RHOPALOCERA made by Rev. B. C. Henry in the Island of Hainan, together with descriptions of some apparently new species.

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I am indebted to my esteemed friend, Rev. B. C. Henry, for the privilege of adding to my collection a number of specimens of the lepidopterous insects of Hainan collected by him upon the occasion of a visit to the island in January of the past year. Between fifteen and twenty years ago the late Robert Swinhoe visited Hainan and made extensive collections, principally of the birds and mammals, devoting but little attention to its insect fauna. Aside from a paper by Mr. F. Moore in the "Proceedings of the Zoological Society of London" for 1878, giving a list of the lepidoptera collected by Mr. Swinhoe and a few incidental references to specimens taken by Swinhoe and contained in the collection of Mr. Moore, I have failed to discover anything bearing directly upon the entomology of the country. The island is still to a great extent *terra incognita* to the entomologist. The list of the species taken by Mr. Henry, which follows, reveals, as might be expected, that the fauna of Hainan is closely allied to that of the adjacent mainland. Unfortunately Mr. Henry's efforts to gain a knowledge of the lepidoptera of this interesting region were interrupted by a violent attack of illness, and the accidental loss of part of his collecting material.

Family **NYMPHALIDÆ** Swainson.

Subfamily DANAINÆ, Bates.

Genus **DANAIS** Latr.

1. **Danais Aglea** Cram., Pap. Exot. iv, t. 377, E.; Marshall and DeNicéville, Butt. India, Burmah and Ceylon, vol. i, p. 38, PL. VI, FIG. 7.

Several specimens, ♂ and ♀.

2. **Danais Gautama** Moore, Ann. and Mag Nat. Hist. series iv, vol. xx, p. 43 (1877).

One poor ♀.

3. **Danais Limniace** Cram., Pap. Exot. I, t. 59. D. E.; M. and DeN. Butt. India, B. and Ceylon, vol. i, p. 47.

Several specimens ♂ and ♀.

4. **Danais Genutia** Cram., Pap. Exot. III, t. 206. C. D.; Distant, Rhop. Malay, p. 18, tab. ii, FIGS. 2 and 3. M. and DeN. l. c. p. 52 (*Danais Plexippus* auctorum, *nec.* Linnæus).

Numerous specimens.

NOTE.—I follow recent writers in restoring the name given by Cramer to this species. The name *Plexippus* is properly applied to the North American species commonly known as *Archippus.* This latter name was applied by Fabricius to the North American species in 1793, whereas Linnaeus had already described and named it *Plexippus* as far back as 1764.

Genus **SALPINX** Hübn.

5. **Salpinx Negleyana** n. sp. PL. I, FIG. 2.

♂. UPPER SURFACE.—*Fore wings* deep black, reflecting brilliant blue, crossed upon the outer half by three rows or bands of spots. The inner band is greatly curved and consists of five purple spots, often pupilled with white. The uppermost of these spots is small and circular, situated on the costal margin a little beyond the middle, the remaining four are oblong, and are grouped in pairs, the first pair at the end of the cell, one spot on either side of the first discoidal nervule, and the lower pair below the cell; one spot on either side of the second median nervule not far from its origin; a submarginal row of from seven to eight oblong white spots shaded inwardly with blue extends across the wing parallel to the external margin; and is in turn followed by a marginal row of minute white or bluish white spots disposed in pairs, a pair on each intra-neural space. These marginal spots are in some specimens more or less obsolete. *Hind wings* deep brown at base and upon the discoidal area, widely testaceous upon anterior margin and broadly fuscous on exterior and posterior margins. A broad oval spot of luteous covers the upper half of the cell near its extremity and the anterior margin of the wing; in addition there is a submarginal row of obscure white spots, of which the three nearest the external angle are the most conspicuous, and a marginal row of small white spots sometimes very distinct, sometimes altogether obsolete.

UNDER SURFACE.—The under surface is uniformly dark fuscous, except on the basal half of the posterior margin of the primaries, which is grayish luteous. The spots are as on the upper surface, but uniformly grayish white, more clearly defined and smaller than on the upper side save the spot above the sexual mark, which is large and broad. A number of minute white spots appear at base of both wings. Head, patagia and under side of thorax spotted with white.

♀.—The female does not differ from the male except in the form of the wings characteristic of the genus, and in the absence of the sexual mark of the primaries and of the luteous marks of the upper and lower surfaces. One female has a sagittate blue spot upon the upper surface of primaries at the end of the cell. Expanse ♂ 3¼ inches; ♀ 3¼–3½ inches.

Described from numerous specimens in my collection. I take pleasure in naming this species at the suggestion of Mr. Henry, in honor of our mutual friend, Hon. Wm. B. Negley, of Pittsburgh, Pa.

Genus **CALLIPLŒA** Butl.

6. **Calliplœa Ledereri** Feld., n. var. HAINANA *mihi.*

I have received quite a series of male and female specimens of what appears to me to be a local race of *Ledereri*, to which I attach the varietal name *Hainana.* The specimens differ from typical *Ledereri* as depicted in the Novara Reise, and in Distant's Rhopalocera Malayana in that the submarginal row consists of seven spots instead of six, and that these spots are distinctly pupilled with white. The chestnut-brown or fulvous tint characteristic of the posterior margin of the fore wings and of the hind wings of Malaccan examples of *C. Ledereri* is also wanting, most examples having this shade replaced by fuscous. The underside of specimens differs in no respect from specimens of *Ledereri* received by me from the Malay Peninsula.

Genus **EUPLŒA** Fabr.

7. **Euplœa Felderi** Butl., Proc. Zool. Soc. Lond. 1866, p. 275.

Two male specimens.

Subfamily SATYRINÆ, Bates.

Genus **EUPLŒAMIMA** n. genus.

8. **Euplœamima Diademoides** Moore, n. var. HENRICI, *mihi* PL. I, FIG. 1, *Zethera diademoides* Moore, Proc. Zool. Soc. Lond. 1878, p. 824, PL. 51, FIG. 3; Marshall and DeN. vol. i, p. 98, PL. XIV, FIG. 33.

The specimens before me differ from the typical form in that the submarginal band on the primaries has seven instead of six white spots, and that there is a band of four white spots crossing the apex of the primaries transversely between this submarginal band and the cell.

I do not believe that this insect is correctly referred to the genus *Zethera* Felder. The neuration and the convex margin of the primaries indicate to me its generic difference from *Zethera.* Before having seen Mr. Moore's description and the second part of vol. i of Marshall and DeNiceville, I made up my mind that the insect is generically distinct from all others, and accordingly submitted a drawing of it under the MS. name of *Euplœamima Henrici* to Mr.

W. L. Distant, who agreed with me at the time in my judgment as to its generic position. Being of the same way of thinking still, I propose the name *Euplœamima* for a genus of which this insect shall be the type.*

Genus **LETHE** Hübn.

9. **Lethe Europa** Fabr., Syst. Ent. p. 500, No. 247; Distant, Rhopal. Malayana, p. 43, Pl. V, figs. 5 and 6.

This well known species seems to be exceedingly abundant in Hainan. Numerous specimens, mostly in a worn condition, ♂♂ and ♀♀.

10. **Lethe Dyrta** Feld., Novara Reise, Lep. III, p. 498, n. 862, t. 68, fig. 4–5. (1867.)

A local variety, having the anterior wings somewhat strongly produced at the apex.

Genus **NEOPE** Butl.

Blanaida Kirby.

11. **Neope Muirheadii** Feld., Wien. Ent. Mon. vi, p. 28.

I have a good series of the males and females of this species, revealing the fact that there is considerable variation in the number and distinctness of the ocelli upon the upper surface of the wings. One female agrees with Felder's description in having three ocelli on the upper surface of the anteriors and two white costal spots. Most of the females have four well marked ocelli on the upper surface of the anteriors. One female has six ocelli on the under surface of the left anterior wing, two of them minute; and four on the right anterior wing. The same female has six ocelli visible on the upper surface of the posteriors. Most of the females and all the males in my possession display only four ocelli on the upper surface of the posteriors. The normal number of ocelli on the lower side of the posteriors is eight.

The species appears to be common in Hainan.

Genus **MELANITIS** Fabr.

12. **Melanitis Ismene** Cram. Moore, Lep. Ceylon i, p. 14, PL. X, FIG. 2, a-b. Distant, Rhop. Malay. p. 42, PL. IV, FIGS. 9, 11 and 12.

The collection contains several typical specimens and one of the pale ochraceous variety figured by Distant Pl. IV, fig. 11. The specimens are all in very poor condition, being flown and rubbed, indicating that in January the brood in Hainan had already nearly passed away.

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* Since the above was put into type I find that Herr Georg Semper in his "*Schmetterlinge der Philippinischen Inseln,*" p. 36, suggests the reference of *Zethesa diademoides* Moore, to the genus *Anadebis* Butl.

Genus **MYCALESIS** Hübn.

Subgenus *Gareris* Moore.

13. **Gareris Francisca** Cram. (*Pap. Francisca*) Pap. Exot. IV, PL. 326, FIG. E. F. (1780.)

Numerous examples of both male and female.

Subgenus *Orsotriæna* Moore.

14. **Orsotriæna Runeka** Moore, Cat. Lep. Mus. E. I. C. i, p, 234.

Several specimens, male and female. Very variable on the underside. In one melanic female the yellowish white line which runs across the primaries and secondaries is obsolete, and the ocelli are very indistinct.

Subgenus *Calysisme* Moore.

15. **Calysisme Mineus** L. Syst. Nat. I. ii, p. 768.

One female of this variable and widely distributed species is larger and lighter in color than any I have received from other parts of the East, but in all other respects agrees with the form accepted as typical.

16. **Calysisme Perseus** Fabr., Ent. Syst. p. 488. Moore, Trans. Ent. Soc. London, 1880, p. 163.

Several specimens ♂ and ♀.

Subgenus *Sadarga* Moore.

17. **Sadarga Charaka** Moore, Proc. Zool. Soc. Lond. 1874, p. 566.

A pair *in coitu.*

Genus **YPHTHIMA** Hübn.

18. **Yphthima Zodia** Butl., Trans. Ent. Soc. Lond. 1871, p. 402.

Several males and females.

The female of this species differs from the male in having but one subanal ocellus on the hind wing. The dark central band upon the under side of the hind wings, which the author of the species regards as differentiating it from all others, is not found in the female, at least not in the two examples of ♀ received by me. These females were found in the envelopes *in coitu* with males which answered perfectly to Mr. Butler's description of *Y. Zodia.*

19. **Yphthima micrommatus** n. sp., Pl. II, fig. 3.

MALE.—UPPERSIDE cinereous gray. *Anterior wing* with a very small black subapical ocellus, pupilled with blue and surrounded by a narrow circle of pale ochraceous. *Posterior wings* with two subanal ocelli like that of the anterior wing. UNDERSIDE paler than the upper, with the subapical spot of the *primaries* much larger than on the upper surface. This spot is oval in form, with two blue spots on the black ground and a broad ring of yellow surrounding it.

Two bands of brown cross the anterior wing. *Posteriors* with six exceeding small ocelli, four near the anal angle, two near external angle.

FEMALE.—Like the male, except that there is but one small ocellus upon upper surface of the secondaries. Expanse 1⅜ inch.

Two ♂ ♂, one ♀. Types in Coll. Holland.

Subfamily ELYMNINÆ, H. S.

Genus **ELYMNIAS** Hübn.

20. **Elymnias Hainana** Moore, Proc. Zool. Soc. Lond. 1878, p. 696.

Two examples, both males.

A local form of *E. Undularis,* Drury.

Subfamily NYMPHALINÆ, Bates.

Genus **CETHOSIA** Fabr.

21. **Cethosia Biblis** Drury, Ill. Exot. Ent. I. t. 4, fig. 2 (1773); Cramer Pap. Exot. II, t. 175, A, B. (1779.)

Numerous examples, ♂ and ♀. Dried specimens of this species gives forth, when relaxed, a strong odor like that of specimens of *Heliconia,* and like these and the various species of *Danais* seems to be exempt from attack by mites.

Genus **CYNTHIA** Fabr.

22. **Cynthia Deione** Erichs., var HAINANA, n. var.

The single specimen of *C. Deione* received by me from Hainan is remarkable for its small size, having only two-thirds of the alar expanse of specimens received from Java and elsewhere. It is also very faintly and obscurely marked upon the upper and lower surfaces, the dark lines and spots found in typical *Deione* being almost obsolete on the upper surface and very indistinct on the lower. The difference is so great that I am almost tempted to regard the insect as a distinct species. It is certainly worthy of a varietal name.

Genus **CUPHA** Billberg.

Messaras, Doubl.

23. **Cupha Erymanthis** Drury, Ill. Exot. Ent. I, t 15, figs. 3 and 4. (1773.)

One poor specimen, ♀.

Genus **ATELLA** Doubl.

24. **Atella Phalanta** Drury (*Pap. P.*), Ill. Exot. Ent. t. 21, fig. 12. (1773.)

Several specimens altogether like examples received from Madagascar and Malacca.

Genus **VANESSA** Fabr.

25. **Vanessa Charonia** Drury (*Pap. C.*), Ill. Exot. Ent. I, t. 15, figs. 1 and 2. (1773.)

One rubbed specimen, ♂.

Genus **PYRAMEIS** Hübn.

26. **Pyrameis Cardui** Linn.

The primal decree on account of sin was, that the earth should bear "thorns and thistles," and so wherever there is earth there are thistles, and wherever there are thistles there is the "thistle butterfly."

Genus **JUNONIA** Hübn.

27. **Junonia Lemonias** L., Syst. Nat. ed. x, p. 473, No. 93 (1758); Mus. Ulr. p. 277 (1764); Marshall and DeN. Vol. II, p. 70. (1886.)

Numerous examples.

28. **Junonia Atlites** L., Cent. Ins. p. 24, n. 72 (Amoen. VI, p. 407.) (1763); Distant, Rhop. Malay. p. 93, Pl. XI, figs. 11 and 12; Marshall and DeN., Vol. II, p. 69. (*J. Laomedia auctorum.*)

Apparently common in Hainan.

29. **Junonia Hierta** Fabr. (*Pap. H.*), Ent. Syst. Suppl. p. 424; *J. Œnone* Cram., Pap. Exot. Vol. I, Pl. XXXV, figs. A, B, C; *J. Hierta* Marshall and DeN., Vol. II, p. 71.

Several specimens.

30. **Junonia Asterie** L., Syst. Nat. Ed. x, p. 472, n. 90 (1758); Distant, Rhop. Malay. p. 94, Pl. XI, figs. 1 and 2; Marshall and DeN., Vol. II, p. 67.

Five examples.

31. **Junonia Almana** L. (*Pap. A.*), l. c. p. 472, n. 89; Marshall and DeN., Vol. II, p. 68.

Six or seven examples.

32. **Junonia Orithya** L. (*Pap. O.*), l. c. p. 473, n. 94; Marshall and DeN., Vol. II, p. 73.

A few examples.

Genus **PRECIS** Hübn.

33. **Precis Iphita** Cram. (*Pap. I.*), Pap. Exot. III, Pl. 209, figs. C, D. (1782.)

Three male specimens.

Genus **ERGOLIS** Boisd.

34. **Ergolis Alternus** Moore, Proc. Ent. Soc. Lond. 1878, p. 698.

This is only a dark, local variety of *E. Ariadne*, L.

Thirty specimens, ♂ and ♀.

Genus **CYRESTIS** Boisd.

35. **Cyrestis Cocles** Fabr., Mant. Ins. Vol. II, p. 7, n. 53; Donovan, Ins. India, Pl. XXIII, fig. 2; Distant, Rhop. Malay. Appendix, p. 442, Pl. XLI, fig. 13; Marshall and DeN., Vol. II, p. 254, Pl. XXIII, fig. 107.

Several specimens.

The figure of Donovan only remotely suggests this species. It is very poor, even for Donovan.

Genus **NEPTIS** Fabr.

36. **Neptis Hordonia** Stoll, Suppl. Cram. Pl. 33, figs. 4 and 4D (1770); *N. Plagiosa* Moore, Proc. Ent. Soc. London, 1878, p. 830; *N. Rihodona* Moore, Proc. Zool. Soc. London, 1878, p. 697.

Several specimens, male and female.

I am convinced, after a careful study of the whole matter aided by long suites of specimens from various Eastern localities, that *N. Plagiosa* Moore, and *N. Rihodona* Moore, are but varietal forms of *Hordonia* Stoll. The Hainan specimens before me answer partly to the description of *Rihodona*, partly to that of *Plagiosa*. DeNicéville suggests that *Plagiosa*, with its densely mottled under-surface, is the winter form of *Hordonia* Stoll. This is also the apparent judgment of collectors on the ground. The Rev. L. C. Biggs, Mr. H. G. Durnford, and Mr. William Doherty, have sent me specimens marked *Hordonia*, which are referable partly to the typical *Hordonia* of Stoll, partly to the two recently erected species of Moore, and show intergrades between all. The slightly increased or diminished width of a band or a spot, the presence of a few more or less speckles on the underside of a wing are hardly sufficient grounds for the erection of new species.

37. **Neptis Eurynome** Westw., in Donovan's Ins. China Pl. XXXV, fig. 4 (1842); *Papilio Leucothoe* Donovan, 1st edit.; *N. Eurynome* Distant, Rhopal. Malayana, p. 156, Pl. XVI, fig. 14.

Numerous specimens ♂ and ♀.

38. **Neptis Ophiana** Moore, Proc. Zool. Soc. London, 1872, p. 561; Distant, Rhop. Malay. p. 153, Tab. XVII, fig. 12; Marshall and DeN., Vol. II, p. 105.

One fine female.

39. **Neptis micromegethes** n. sp.

This species belongs to the second group indicated by DeNicéville. Its expanse is 1.5 inches. The ground color is black, the markings pure white. The discal streak of the fore wings is broad and long, slightly indented at end of cell and not reaching below the third submedian nervule. Three large oblique spots near the apex and four large spots reversely oblique to the middle of the posterior margin. A submarginal band of small white spots interrupted opposite the extremity of the discal streak and bordered on either side by a pale line. Fringe white. Hind wing with discal band broad, straight and even, followed by a pale line, the submarginal white band straight, prominent, gradually diminishing in width from the anal to the outer angle; a pale marginal line beyond. The underside exactly as the upperside, except that the deep black of the upper surface is replaced by fuscous, and the light markings are more prominent and distinct.

The insect is in many respects near *N. Burmana* DeN., but its expanse is less by nearly one inch, and there is but one marginal line on the underside of the hind wings, the ground color of the underside is fuscous not ferruginous, except at base of costa, where there is a slight tinge of rusty red perceptible.

Genus **EUTHALIA** Hübn.

40. **Euthalia Lubentina** Cram. (*Pap. L.*), Pap. Exot. II, t. 155, C. D. (1779)

One ruined female.

41. **Euthalia Xiphiones** Butl., Proc. Zool. Soc. 1868, p. 609, n. 60, t. 45, fig. 6; Dist., Rhop. Malay. Appendix, p. 439, Pl. XXXVI, figs. 9 and 10.

One fine male.

Genus **SYMPHÆDRA** Hübn.

42. **Symphædra Dirtea** Fabr., Ent. Syst. III, 1, p. 59, n. 184. (1793.)

Three males, one female.

Family LEMONIIDÆ Kirby.

Subfamily NEMEOBIINÆ, Bates.

Genus **DODONA** Hew.

43. **Dodona Henrici** n. sp. Pl. II, fig. 2.

♀. Form of *D. longicaudata* DeN.

Upper surface.—Ground color white. *Fore wings* fuscous at base, crossed about one-fourth of distance from base by dark fuscous band about one-tenth inch in breadth. A black submarginal band, very wide at costa, where it is cleft by a wedge-shaped spot of white, runs from beyond the middle of the wing to the inner angle, just before reaching which it is bulged outwardly to give place to a conspicuous white lunule which interrupts it. A broad black border, broadest at the apex, covers the outer margin, being broken at each intra-neural space by a small white spot. *Hind wings* with the lines of the fore wings produced upon them, growing narrower and less distinct toward the anal angle. The submarginal band fades into light fulvous, interrupted by two or three black points before reaching the anal angle. The marginal band of black is interrupted by a series of narrow linear white lines parallel to the margin. Tail long, anal lobe black, with white lunate mark on inner edge.

Under surface marked as the upper, save that the bands are narrower and more distinct, and of a decidedly ferruginous tint, and what is a broad fuscous shade at the base of the wings upon the upper surface is resolved upon the lower side into three well defined narrow lines with white interspaces. Expanse 1¾ inches.

Type in Coll. Holland.

There is no mark to indicate the locality of this specimen, but it was probably taken in the hill-country of the interior of the island.

Genus **ZEMEROS** Boisd.

44. **Zemeros Confucius** Wallace, MS. Moore, Proc. Zool. Soc. London, 1878, p. 701.

This appears to be a good species, my specimens which, though not numerous, are in rather poor preservation, for the most part are even smaller than the dimensions given by Mr. Moore.

Genus **ABISARA** Feld.

Sospita Hew.

45. **Abisara Lydda** Hew. (*S. Lydda*), Exot. Butt. III : Dodona and Sospita, figs. 13 and 15; *S. Saturata* Moore, Proc. Zool. Soc. London, 1878, p. 701.

A long suite of specimens, male and female.

Family LYCÆNIDÆ, Steph.

Genus **MILETUS** Hübn.

46. **Miletus Chinensis** Feld., Reise Nov. Lep. II, p. 284, n 364, Pl. 35 figs. 35 and 36.

Two males, one female.

Genus **LYCÆNA** Fabr.

47. **Lycæna Roxus** Godt., Enc. Méth. IX, p. 659, n. 142; Distant, Rhop. Malay. p. 216, Tab. XXII, fig. 24.

48. **Lycæna Aelianus** Fabr., Ent. Syst. III, i. p. 280, n. 79; Distant, Rhop. Malay. p. 228, Tab. XXI, fig. 18. XXII, fig. 19.

49. **Lycæna Bæticus** L., Syst. Nat. I, 2, p. 789, n. 226.

The specimens are much larger than those I have from Italy and Greece.

50. **Lycæna Similis** Moore, Proc. Zool. Soc. London, 1878, p. 702.

51. **Lycæna** sp?

One male.

Genus **THECLA** Fabr.

52. **Thecla Phœnicoparyphus** n. sp. Pl. II, fig. 1.

MALE.—UPPER SURFACE dark brown. *Fore wing* with a wide and irregular subapical spot of deep red. *Hind wings* broadly margined on the exterior with the same color. A series of minute black marginal lunules is followed by the bluish white fringe. Tail long and dark brown in color. UNDER SURFACE bright lustrous ochreous. *Fore wings* narrowly bordered with red, the border widening from apex toward the inner angle, where it is terminated by a quadrate spot of dark gray bordered externally and internally by a narrow line of white. *Hind wings* broadly bordered with dark red, fading into pink at the outer margin. This red marginal band is set off internally by a row of white lunules, one for each intra-neural space, and by the minute black crescents on the margin. Antennæ, upper surface of head, thorax and abdomen black. Legs, breast and lower side of abdomen white. Expanse 1¼ inches.

Type in Coll. Holland.

Family **PAPILIONIDÆ** Leach.

Subfamily PIERINÆ Swainson.

Genus **PONTIA** Fabr.

53. **Pontia Xiphia** Fabr., Spec. Ins. II, p. 43, n. 180.

Several examples.

Genus **TERIAS** Swainson.

54. **Terias Hecabe** L., Syst. Nat. ed. x, p. 470, n. 74. (1758.)

One example.

55. **Terias Anemone?** Feld., Wien, Ent. Mon. VI, p. 23, n. 7.

Two specimens.

56. **Terias Læta** Boisd., Spec. Gen. I, p. 674, n. 36.

Several specimens.

57. **Terias Drona** Horsfield, Cat. Lep. E. I. C. p. 137, n. 64, t. 1, fig. 13. (1892); *T. Hainana,* Moore, Proc. Zool. Soc. London, 1878, p. 700.

Numerous examples which I refer to this species.

Mr. Moore in his paper in the Proc. Zool. Soc. London, 1878, p. 699, etc., gives us a number of new species of *Terias* from Hainan, and one species which he calls *T. Hainana* I am forced to believe is none other than *T. Drona*, named by my kinsman, Dr. Horsfield, in 1829.

Genus **PIERIS** Schrank.

58. **Pieris Canidia** Sparrm., Amoen. Acad. VII, p. 504, note m. (1768.)
P. Gliciria, Cram. Pap. Exot. II, Pl. 171, E. F.

Several males and females.

59. **Pieris Phryne** Fabr., Syst. Ent. p. 473, n. 131; Moore, Lep. Ceylon, Vol. I, p. 136, Pl. 53, figs. 1, 1a. *Pap. Evagete* Cram., Pap. Exot. III, Pl. 221, figs. F and G.

Genus **APPIAS** Hübn.

60. **Appias Inornata** Moore, Proc. Zool. Soc. London, 1878, p. 700.

Differs from *A. Hippo* in the narrower border of underside of hind wings.

61. **Appias Amasene** Cram., Pap. Exot. I, Pl. 44, fig. A.

One male which I doubtfully refer to this species.

Genus **DELIAS** Hübn.

62. **Delias Hierte** Hübn., Zutr. Ex. Schmett. figs. 77, 78.

One fine male.

Genus **NEPHERONIA** Butl.

63. **Nepheronia Valeria** Cram., Pap. Exot. I, Pl. 85, A.

Apparently common in Hainan. I have a long suite of males and females, the latter being rather more numerous than the former, and mimicking *Danais Aglea* very closely.

Genus **IXIAS** Hübn.

64. **Ixias Pyrene** Linn., Mus. Ulr. p. 241. Cram., Pap. Ex. II, t. 125, A–C.

Several specimens.

Genus **CATOPSILIA** Hübn.

65. **Catopsilia Gnoma** Fabr., Syst. Ent. App. p. 828, n. 152–53; Butl., Lep. Exot. p. 43, Pl. XVI, figs. 1–4.

Male and Female.

Subfamily PAPILIONINÆ Swainson.

Genus **PAPILIO.**

66. **Papilio Agenor** Linn., Mus. Ulr. p. 194; Distant, Rhop. Malay. p. 339, Pl. XXIX, fig. 1.

Two somewhat injured females.

67. **Papilio Esperi** Butl., Trans. Linn. Soc. ser. 2, Zool. Vol. I, p. 553, Pl. 68, fig. 7. Distant, l. c. p. 341, Tab. XXVII, figs. 1 and 6.

Several males.

68. **Papilio Achates** Cram., Pap. Exot. II, Pl. 182, figs. A, B. Distant, l. c. p. 342, Tab. XXVIII, fig. 5.

One female.

69. **Papilio Telephus** Feld., Reise Nov. Lep. I, p. 64, n. 49. Distant, l. c. p. 361.

One male.

70. **Papilio Agamemnon** Linn., Mus. Ulr. p. 202. Distant, l. c. p. 363, Pl. XXXII, fig. 7.

Several examples of the long-tailed variety.

71. **Papilio Sarpedon** L., Mus. Ulr. p. 196. Distant, l. c. p. 359, Pl. XXXII, fig. 6.

Numerous examples.

72. **Papilio Megarus** Westw., Arc. Ent. II, Pl. 79, fig. 2.

Numerous examples, mostly flown and torn.

73. **Papilio Clytia** L., Mus. Ulr. p. 296. Distant, l. c. p. 353, Tab. XXVII b, fig. 2.

Numerous examples, mostly lighter than the figure in Mr. Distant's work.

74. **Papilio Panope** L., Syst. Nat. I, 2. p. 782, n. 196.

Papilio Saturata Moore, Proc. Zool. Lond. 1878, p. 697.

The specimens are all of the dark form named *Saturata* by Mr. Moore. Aside from the fact that the specimens are darker than Indian examples I can detect no difference whatever. Long suites of specimens.

Boisduval suggested, and I have no doubt that *P. Clytia* and *P. Panope* are simply dichromatic forms of the species. Breeding can alone declare the fact.

75. **Papilio Erithonius** var. *Malayanus* Butl., Trans. Linn. Soc. ser. 2, Zool. Vol. I,' p. 552, n. 8.

Apparently excessively common in Hainan.

76. **Papilio Polytes** L., Syst. Nat. ed. x, p. 460, n. 7. *Pap. Pammon* L., l. c. p. 460, n. 8. Dist., l. c. p. 347, Tab. XXIII, figs. 7–10.

Still more common than *P. Erithonius.*

77. **Papilio Aristolochiæ** Fabr., Syst. Ent. p. 443, n. 3.

Several examples of the large typical form.

78. **Papilio Helenus** L., Mus. Ulr. p. 185. Dist., l. c. p. 343. Pl. XXIX, fig. 3.

One male differing considerably on the underside from the figure given by Mr. Distant, yet plainly of the same species.

79. **Papilio Paris** L., Mus. Ulr. p. 184. Drury, Ill. Ex. Ent. I, t. 12, figs. 1–2.

One poor male.

80. **Papilio Nomius** Asp. Eusl. Schmett. t. 52, fig. 3. Moore, Lep. Ceylon, Vol. I, p. 142, Pl. 62, fig. 2. *P. Swinhoei* Moore, Proc. Zool. London, 1878, p. 697.

Large number of males and females. Some specimens have the costal bands a little broader than those of the figure in the *Lepid. of Ceylon*, others might have served the artist as his model. I cannot but regard the name *Swinhoei* as a synonym for *Nomius.*

81. **Papilio Antiphates** Cram., Pap. Exot. I, Tab. 72, A, B. Dist., Rhop. Malay. p. 357, Pl. XXXI, fig. 5. Moore, Lep. Ceylon, Vol. I, p. 142, Tab. 63, figs. 1, 1a.

But one damaged specimen, in which there is much less green on the underside of the wings than in the figures of Cramer, Distant, and Moore.

Family HESPERIDÆ Leach.

Genus BAORIS Moore.

82. **Baoris Chaya** Moore, Proc. Ent. Soc. London 1865, 791. Distant, Rhop. Malay. p. 380, Tab. XXXIV, fig. 9.

Several examples.

83. **Baoris Cingala** Moore, Lep. Ceylon, p. 167, Pl. 70, figs. 3, 3a.

Several examples.

84. **Baoris Distictus** n. sp. Pl. II, fig. 4.

MALE.—*Upper surface* uniformly olive-brown, cilia pale cinereous. *Primaries* with two small, triangular, semi-diaphanous white spots beyond the middle of the wing and between the submedian nervules. *Underside* lighter than the upper, with a hoary lustre, especially on the posteriors. A few scarcely visible light scaleless spots may be detected adjacent to the two white spots of the primaries, which reappear on the underside. A curved submarginal row of obscure brown spots is found upon the secondaries. Underside of palpi and head white. Expanse of wings 1⅜ inches.

Type in Coll. Holland.

Genus **TELICOTA** Moore.

85. **Telicota Augias** L., Syst. Nat. I, 2, p. 794, n. 257 (1767). Dist., Rhop. Malay. p. 382, Tab. XXXIV, fig. 23.

Apparently common.

Genus **CYCLOPIDES** Hübn.

Heteropterus Dum.

86. **Cyclopides Henrici** n. sp. Pl. II, fig. 5.

MALE.—*Upper surface* uniformly very dark brown with an olivaceous reflection. *Primaries* with two minute quadrate subapical spots. *Under surface* lighter in color. *Primaries* with subapical white spots as on upper surface; posterior half of the wing darker than the anterior margin. *Secondaries* with two transverse cloudy bands of dark brown upon the lighter ground. Underside of palpi and head white. Expanse 1½ inches.

Type in Coll. Holland.

Genus **ABARATHA** Moore.

87. **Abaratha Sura** Moore, Proc. Zool. Soc. Lond., 1865, p. 786. Distant. Rhop. Malay. p. 390, Tab. XXXIV, fig. 16.

One example.

Genus **UDASPES** Moore.

88. **Udaspes Folus** Cram., Pap. Exot. I, t. 74, fig. F. Dist., l. c. p. 398, Pl. XXXIV, fig. 3.

One fine example.

A comparison of the list given by Mr. Moore of the species taken in Hainan by Mr. Swinhoe shows twenty-nine species not enumerated on the foregoing list as found on the island, while in the foregoing paper there are given forty-six species not mentioned by Mr. Moore. There are thus ascertained to be nearly one hundred and twenty species of Rhopalocera in Hainan, and doubtless future explorations will greatly increase the number. Of this number only about one-fifth appear, to be strictly speaking, new forms, and these are mainly varietal, many of them hardly entitled to specific rank.

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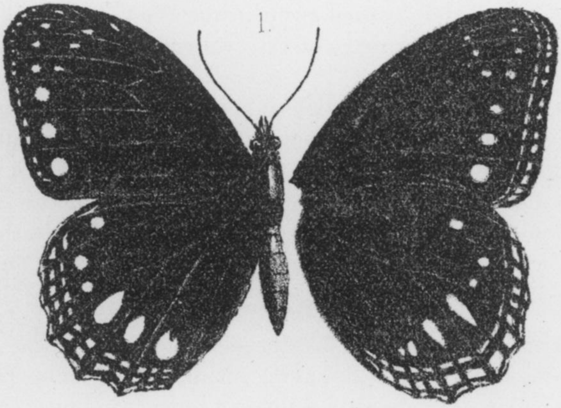

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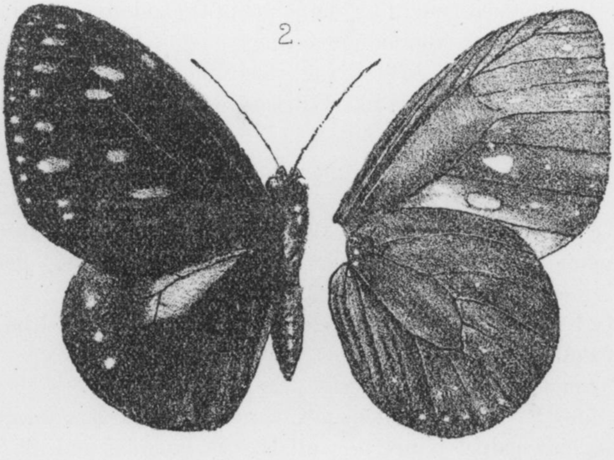

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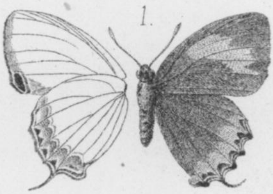

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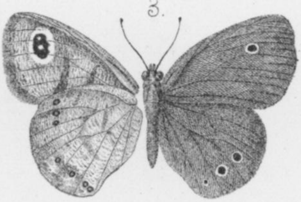

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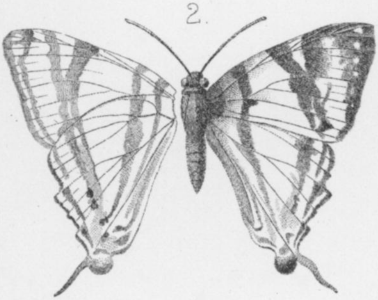

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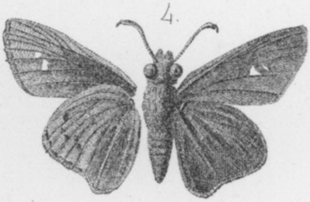

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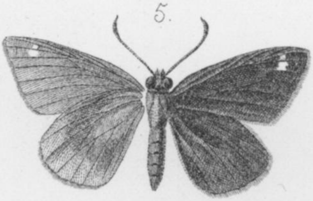

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